

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Donaldson Company, Inc.  
Attn: Mr. Dan Blackburn  
815 Progress Drive  
Dixon, Illinois 61021

<u>Application No.:</u> 87040086	<u>I.D. No.:</u> 103817AAD
<u>Applicant's Designation:</u> FINE FIBER	<u>Date Received:</u> June 22, 2005
<u>Subject:</u> Air Filter Manufacturing Facility	
<u>Date Issued:</u> November 7, 2005	<u>Expiration Date:</u> December 1, 2008
<u>Location:</u> 815 Progress Drive, Dixon	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of a filter media treatment operation, air filter manufacturing operation, charcoal filter manufacturing operation controlled by filters, three boilers, and large panel line pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., volatile organic material to less than 100 tons per year, individual hazardous air pollutant (HAP) to less than 10 tons per year and total HAPs combined to less than 25 tons per year, etc.). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. Emissions and operation of the new filter media treatment operation shall not exceed the following limits:

<u>Pollutant</u>	<u>Usage and Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Non HAP VOM	3.3	32.9
Formaldehyde	1.0	9.5

These limits define potential emissions and are based on maximum VOM and HAP contents, all VOM and HAPS emitted and requested by the Permittee. Compliance with annual limits shall be determined from a running total of 12 months of data.

3. Emissions of volatile organic material (VOM) and operation of the large panel line, charcoal filter operation, and air filter operation, including filter assembly lines 5013 and M1A1, and all clean-up operations shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Isopropyl Alcohol	0.07	0.7	0.07	0.7
Adhesives	2.5	25	2.5	25
Filter Media	0.7	6.7	0.7	6.7
Clean-Up Solvents	1.3	13.0	1.3	13.0
MEK (HAP)	0.79	7.9	0.79	7.9
Xylene (HAP)	0.15	1.5	0.15	1.5
Vanishing Lube	0.14	1.4	0.14	<u>1.4</u>
			Total:	56.2

These limits define the potential emissions of VOM and are based on maximum material usages, maximum VOM content for each material, and VOM usage as determined by the equation in Special Condition 11(c). Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

- 4a. Emissions and operation of all fuel combustion emission sources shall not exceed the following limits:

<u>Fuel Usage</u>		<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>Factor</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
20.53	205.3	NO <sub>x</sub>	100	1.03	10.3
		CO	84	0.87	8.7
		PM	7.6	0.1	0.8
		VOM	5.5	0.1	0.6
		SO <sub>2</sub>	0.6	0.1	0.1

These limits are based on maximum fuel usage and standard emission factors. Compliance with the annual limits shall be determined from a running total of 12 months of data.

- b. Natural gas shall be the only fuel(s) fired in all the fuel combustion emission sources. Use of any other fuel will require a revised permit.
5. This permit is issued based on negligible emissions of particulate matter from the charcoal filter operation. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
6. This permit is issued based on negligible emissions of ozone from the charcoal filter operation. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

7. This permit is issued based on emissions of VOM from each process emission unit not exceeding 8 pounds in any given hour, pursuant to 35 Ill. Adm. Code 215.301.
8. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs or such less quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program Permit (CAAPP) permit from the Illinois EPA.
9. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
10. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
11. The Permittee shall maintain monthly records of the following items:
  - a. Identification and amount of each solvent, clean-up solvent, adhesive, vanishing lube, filter media used and any other material containing HAPs or VOM (lb or gallons/month and ton or gallons/year);
  - b. VOM and individual HAP content of each solvent, clean-up solvent, adhesive, vanishing, lube, filter media and any other material containing HAPs or VOM (lb VOM/gallon or % weight);
  - c. For plantwide calculations of VOM or HAPs usage and emissions, the following equation shall be used:

$$Te = \sum_i^n AiBi$$

Where:

Te = VOM or HAPs usage in units of lb/mo or gal/mo;

n = Number of different solvents, clean-up solvent, adhesives, vanishing lube, and filter medias used each month;

i = Subscript denoting an individual solvent, clean-up solvent, vanishing lube, adhesive, and filter media;

Ai = Weight of VOM or HAPs per volume of each solvent, clean-up solvent, vanishing lube, adhesive and filter media used each month in units of lbs VOM/gal or weight percent of VOM of each solvent used each month (% weight); and

Bi = Amount of each solvent, clean-up solvent, adhesive, vanishing lube, and filter media used each month in units of gallons/month or lbs/month.

- d. Calculations of individual HAP usage and emissions from the plant using the same equation in Condition 11(c);
  - e. Monthly and annual emissions of VOM and HAPs from the plant with supporting calculations (tons/month and tons/year); and
  - f. Total natural gas usage for all fuel combustion emission sources (mmscf/month and mmscf/year).
12. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
13. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
14. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

Please note the new filter media treatment operation from Construction Permit 05060056 has been added to this permit.

Page 5

If you have any questions on this permit, please contact Randy Solomon at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:RBS:jar

cc: Region 2  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the filter manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM, 25 tons per year of combined HAPs, and 10 tons per year of single HAPs, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled, and control measures are more effective than required in this permit.

E M I S S I O N S (Tons/Year)							
<u>Operations</u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>PM</u>	<u>VOM</u>	<u>HAPs</u>		
					<u>Single</u>	<u>Combined</u>	
Filter Media Treatment				42.4			
All Other Operations			0.44	56.2			
Natural Gas Combustion	<u>10.3</u>	<u>8.7</u>	<u>0.80</u>	<u>0.6</u>			
Totals	10.3	8.7	0.80	98.6	< 10	< 25	

RBS:psj